

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An electronic circuit device comprising:
an electronic circuit substrate over which an optical shutter, an optical sensor, and an electronic circuit including a plurality of laminated layers, wherein each of the plurality of laminated layers include thin film transistors, are disposed,
wherein the electronic circuit substrate is a transparent substrate,
wherein said optical shutter controls transmission or non-transmission of a part of an optical signal from an outside,
wherein the optical sensor is connected to an electric source through a thin film transistor, and connected to a buffer,
wherein said optical sensor converts another part of said optical signal into an electronic signal, and
wherein said electronic signal is inputted into the electronic circuit through the buffer.

2. (Previously Presented) The electronic circuit device according to claim 1, wherein the thin film transistor of a lowest layer of the thin film transistors included in the electric circuit is crystallized by a heat treatment, and the thin film transistor of another layer of the thin film transistors included in the electric circuit is crystallized by irradiating a laser beam.

3. (Previously Presented) The electronic circuit device according to claim 1, wherein the thin film transistors included in the electric circuit are crystallized by a heat treatment.

4. (Original) The electronic circuit device according to claim 2, wherein the heat treatment is a heat treatment using a metal catalyst.

5. (Original) The electronic circuit device according to claim 3, wherein the heat treatment is a heat treatment using a metal catalyst.

6. (Original) The electronic circuit device according to claim 1, wherein said optical sensor over said transparent substrate includes an amorphous silicon photodiode, or an amorphous silicon phototransistor.

7. (Original) The electronic circuit device according to claim 1, wherein said optical sensor over said transparent substrate includes a polysilicon (p-Si) photodiode, or a polysilicon phototransistor.

8. (Original) The electronic circuit device according to claim 1, wherein said optical shutter comprises a liquid crystal which is sandwiched between two transparent substrates.

9. (Original) The electronic circuit device according to claim 8, further comprising a polarizing plate, wherein said polarizing plate is disposed over said transparent substrate, and said polarizing plate is disposed only nearby said optical shutter.

10. (Previously Presented) An electronic circuit device comprising:
a configuration in which a plurality of electronic circuit substrates are superimposed,

wherein an optical shutter, an optical sensor, and an electronic circuit including a plurality of laminated layers are disposed over each of the electronic circuit substrates, wherein each of the plurality of laminated layers include thin film transistors, wherein the electronic circuit substrate is a transparent substrate, wherein said optical shutter controls transmission or non-transmission of a part of an optical signal from an outside, wherein the optical sensor is connected to an electric source through a thin film transistor, and connected to a buffer, wherein said optical sensor converts another part of said optical signal into an electronic signal, and wherein said electronic signal is inputted into the electronic circuit through the buffer.

11. (Previously Presented) The electronic circuit device according to claim 10, wherein the thin film transistor of a lowest layer of the thin film transistors included in the electric circuit is crystallized by a heat treatment, and the thin film transistor of another layer of the thin film transistors included in the electric circuit is crystallized by irradiating a laser beam.

12. (Previously Presented) The electronic circuit device according to claim 10, wherein the thin film transistors included in the electric circuit are crystallized by a heat treatment.

13. (Original) The electronic circuit device according to claim 11, wherein the heat treatment is a heat treatment using a metal catalyst.

14. (Original) The electronic circuit device according to claim 12, wherein the heat treatment is a heat treatment using a metal catalyst.

15. (Original) The electronic circuit device according to claim 10, wherein said optical sensor over said transparent substrate includes an amorphous silicon photodiode, or an amorphous silicon phototransistor.

16. (Previously Presented) The electronic circuit device according to claim 10, wherein said optical sensor over said transparent substrate includes a polysilicon (p-Si) photodiode, or a polysilicon phototransistor.

17. (Original) The electronic circuit device according to claim 10, wherein said optical shutter comprises a liquid crystal which is sandwiched between two transparent substrates.

18. (Original) The electronic circuit device according to claim 17, further comprising a polarizing plate, wherein said polarizing plate is disposed over said transparent substrate, said polarizing plate is disposed only nearby said optical shutter.

19. (Currently Amended) An electronic circuit device comprising:
an electronic circuit substrate over which an optical shutter, a plurality of optical sensors, and an electronic circuit including a plurality of laminated layers, wherein each of the plurality of laminated layers include thin film transistors, are disposed,
wherein the electronic circuit substrate is a transparent substrate,
wherein said optical shutter controls transmission or non-transmission of a part of an optical signal from an outside,
wherein the optical sensor is connected to an electric source through a thin film transistor, and connected to a buffer,
wherein said plurality of optical sensors convert another part of said optical signal into an electronic signal,

wherein said electronic signal is inputted into the electronic circuit through the buffer, and

wherein each of said optical sensor is formed on different layers from each other in the plurality of the laminated layers.

20. (Previously Presented) The electronic circuit device according to claim 19, wherein the thin film transistor of a lowest layer of the thin film transistors included in the electric circuit is crystallized by a heat treatment, and the thin film transistor of another layer of the thin film transistors included in the electric circuit is crystallized by irradiating a laser beam.

21. (Previously Presented) The electronic circuit device according to claim 19, wherein the thin film transistors included in the electric circuit are crystallized by a heat treatment.

22. (Original) The electronic circuit device according to claim 20, wherein the heat treatment is a heat treatment using a metal catalyst.

23. (Original) The electronic circuit device according to claim 21, wherein the heat treatment is a heat treatment using a metal catalyst.

24. (Original) The electronic circuit device according to claim 19, wherein said optical sensor over said transparent substrate includes an amorphous silicon photodiode, or an amorphous silicon phototransistor.

25. (Original) The electronic circuit device according to claim 19, wherein said optical sensor over said transparent substrate includes a polysilicon (p-Si) photodiode, or a polysilicon phototransistor.

26. (Original) The electronic circuit device according to claim 19, wherein said optical shutter comprises a liquid crystal which is sandwiched between two transparent substrates.

27. (Original) The electronic circuit device according to claim 26, further comprising a polarizing plate, wherein said polarizing plate is disposed over said transparent substrate, said polarizing plate is disposed only nearby said optical shutter.

28. (Currently Amended) An electronic circuit device comprising:
an electronic circuit substrate over which an optical shutter, a plurality of optical sensors, and an electronic circuit including a plurality of laminated layers, wherein each of the plurality of laminated layers include thin film transistors, are disposed,
wherein the electronic circuit substrate is a transparent substrate;
wherein each of the optical sensor is connected to a respective electric source through a respective thin film transistor, and connected to a respective buffer,
wherein each of said optical sensor is formed on different layers from each other in the plurality of the laminated layers,
wherein each of said optical sensor is controlled by the thin film transistor connected to the optical sensor,
wherein said optical shutter controls transmission or non-transmission of a part of an optical signal from an outside,
wherein said plurality of optical sensors convert another part of said optical signal into an electronic signal, and
wherein said electronic signal is inputted into the electronic circuit through the buffer.

29. (Previously Presented) The electronic circuit device according to claim 28, wherein the thin film transistor of a lowest layer of the thin film transistors included in the electric circuit is crystallized by a heat treatment, and the thin film transistor of another layer of the thin film transistors included in the electric circuit is crystallized by irradiating a laser beam.

30. (Previously Presented) The electronic circuit device according to claim 28, wherein the thin film transistors included in the electric circuit are crystallized by a heat treatment.

31. (Original) The electronic circuit device according to claim 29, wherein the heat treatment is a heat treatment using a metal catalyst.

32. (Original) The electronic circuit device according to claim 30, wherein the heat treatment is a heat treatment using a metal catalyst.

33. (Original) The electronic circuit device according to claim 28, wherein said optical sensor over said transparent substrate includes an amorphous silicon photodiode, or an amorphous silicon phototransistor.

34. (Original) The electronic circuit according to claim 28, wherein said optical sensor over said transparent substrate includes a polysilicon (p-Si) photodiode, or a polysilicon phototransistor.

35. (Original) The electronic circuit device according to claim 28, wherein said optical shutter comprises a liquid crystal which is sandwiched between two transparent substrates.

36. (Original) The electronic circuit device according to claim 35, further comprising a polarizing plate, wherein said polarizing plate is disposed over said transparent substrate, said polarizing plate is disposed only nearby said optical shutter.

37.-38. (Canceled)